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(54) **CLOSED VIAL FILL SYSTEM FOR ASEPTIC DISPENSING**

(75) Inventors: **Mehmet Husnu**, Phoenix, AZ (US);
Dennis Eshima, Phoenix, AZ (US);
Derrick Alcaide, Los Angeles, CA (US);
Scott N. Danhof, Plain City, OH (US);
Jim Gleeson, Columbus, OH (US); **Eric Hassenpflug**, Westerville, OH (US); **Jim Prescott**, Columbus, OH (US)

(73) Assignee: **Cardinal Health 414, LLC**, Dublin, OH (US)

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CPC **B65B 37/06** (2013.01); **B65B 3/003** (2013.01)

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See application file for complete search history.

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Primary Examiner — Timothy L Maust

(57) **ABSTRACT**

A closed path vial fill system includes a bulk product vial, a peristaltic pump operated by a stepper motor, a dispensing manifold assembly to which may be coupled at least one final product vial, an optional quality check station, and an optional waste collection system. A concentration, activity, and volume (CAV) sensor may be incorporated into the system to receive a radiopharmaceutical product directly from a synthesizing unit. A control system may be integrated into the system to provide automated control of various aspects of the radiopharmaceutical dispensing process. The system is used to aseptically dispense finished radiopharmaceuticals into receiving vessels, such as a Quality Control vial, a sterility vial, and/or final product vials, while providing users an efficient means for removing and discarding contaminated disposable components.

49 Claims, 61 Drawing Sheets

